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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/539,118	YAMASHINA, YUKIHISA
	Examiner	Art Unit
	GREG A. BORSETTI	4141

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *26 June 2006*.
2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-11* is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) *1-11* is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☒ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on *26 June 2006* is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a) ☐ All   b) ☐ Some * c) ☐ None of:
      1. ☒ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____.
      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date *6/26/2006*.
4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1.   Claims 1-11 are pending.

Information Disclosure Statement

2.   The Information Disclosure Statement (IDS) submitted on 6/26/2006 is not in

compliance with the provisions of 37 CFR 1.97.

Drawings

3.   The drawings filed on 6/26/2006 are accepted by the examiner.

Specification

4.   The abstract of the disclosure is objected to because: The sheet presenting the

abstract may not include other parts of the application or other material (37 CFR

1.72(b)). The abstract cites references (103C, 101B, etc) from the drawings. Correction

is required. See MPEP § 608.01(b).

Claim Objections

5.   Claims 1-11 are objected to because of the following informalities: The sheet or

sheets presenting the claims may not include other parts of the application or other

material (37 CFR 1.75). The claims cite references (103C, 101B, etc) from the

drawings. Appropriate correction is required. See MPEP § 608.01(i).

Claim Rejections - 35 USC § 112 2nd Paragraph

6.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite

for failing to particularly point out and distinctly claim the subject matter which applicant

regards as the invention. Claim 1 cites "a registering means" and a "receiving means" it

is not clearly understood to what the registering and the receiving functions do.

Claim Rejections - 35 USC § 103

7.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-10 are rejected under 35 U.S.C. 102(e) as being disclosed by Kaji (US

Patent # 5907821) in view of D'Agostini (US Pre Grant Publication #20030040900) and

further in view of Brown (US Patent #5805832).

As per claim 1, Kaji teaches:

- **a first memory (101A) which stores a plurality of original texts to be**

  translated

- [Kaji, column, lines] discloses "The memory 2 stores a bilingual dictionary

  generating program 20, a Japanese dictionary 21, an English dictionary 22, a

  bilingual dictionary 23, and a Japanese text 24 and _**an English text 25**_ which

  form a bilingual text. The bilingual dictionary 23 contains a plurality of records

  each of which includes a Japanese word 231 and a corresponding English word

  232 as shown, for example, in FIG. 6, and can be retrieved by using a

  Japanese word as a key." The English text is what is to be translated.

- **a second memory (101B) which stores draft translations of the respective**

  original texts in association with the plurality of original texts stored in

  said first memory

- [Kaji, column 4, lines 48-56] discloses "The memory 2 stores a bilingual

  dictionary generating program 20, a Japanese dictionary 21, an English

  dictionary 22, a bilingual dictionary 23, and _**a Japanese text 24**_ and an English

  text 25 which form a bilingual text. The bilingual dictionary 23 contains a

  plurality of records each of which includes a Japanese word 231 and a

  corresponding English word 232 as shown, for example, in FIG. 6, and can be

  retrieved by using a Japanese word as a key." The Japanese text is a draft

translation of the English text because it has corresponding words that are

compared such that a bilingual corpus is developed.

- **a third memory (101B) which stores translations in association with the**

  plurality of original texts

- [Kaji, column 4, lines 48-56] discloses "The memory 2 stores a bilingual

  dictionary generating program 20, a Japanese dictionary 21, an English

  dictionary 22, a bilingual dictionary 23, and a Japanese text 24 and an English

  text 25 which form a bilingual text. *The bilingual dictionary 23 contains a*

  plurality of records each of which includes a Japanese word 231 and a

  corresponding English word 232 as shown, for example, in FIG. 6, and can

  be retrieved by using a Japanese word as a key." The bilingual dictionary stores

  the translations between the English and the Japanese texts that are

  developed.

- **draft-translation outputting means (103A) for outputting an original text**

  read out from said first memory (101A) and a draft translation read out

  from said second memory (101B) to the translator terminal via said

  communication network

- [Kaji, column 5, lines 4-8] discloses "the bilingual dictionary 23 is looked up to

  relate the co-occurrent Japanese word set with the co-occurrent English word

  set. *Then, the program 20 selects one or more pairs of words with high*

  correlation, and displays the selected pair(s) of words as candidate

translation pair(s) of words on the display device 4." The original text read

out and the translation read out is displayed to the user.

- **translation receiving means (103B) for receiving the translation edited in**

  accordance with an instruction from the translator from said translator

  terminal

- [Kaji, column 13, lines 22-30] discloses "For example, two translation pairs of

  Japanese and English words shown in FIG. 11 can be extracted from the

  bilingual text comprised of Japanese and English texts shown in FIGS. 3A and

  3C, by use of the bilingual dictionary which originally includes three translation

  pairs of words as shown in FIG. 6. *The extracted translation pairs of words*

  are registered into the bilingual dictionary. Thus, the bilingual dictionary can

  be augmented incrementally." The bilingual dictionary receives the machine

  translation developed from the texts and monolingual dictionaries with an

  instruction from the translator of how many words are registered into the

  dictionary.

- **translation-to-be-proofread storing means (103C) which stores the**

  translation received by said translation receiving means in said third

  memory (101B)

- [Kaji, column 4, lines 48-56] discloses "The memory 2 stores a bilingual

  dictionary generating program 20, a Japanese dictionary 21, an English

  dictionary 22, a bilingual dictionary 23, and a Japanese text 24 and an English

  text 25 which form a bilingual text. *The bilingual dictionary 23 contains a*

plurality of records each of which includes a Japanese word 231 and a corresponding English word 232 as shown, for example, in FIG. 6, and can be retrieved by using a Japanese word as a key." The bilingual dictionary stores the translations between the English and the Japanese texts that are developed and are ready to be proofread.

Kaji fails to teach and D'Agostini teaches in analogous art,

> **- a fourth memory (101B) which stores proofread translations in association with the proofread translations associated with the plurality of original texts**

> - [D'Agostini, ¶ 0154] discloses "In this way the system retrieves automatically not only the correction operated by the human operator as traditionally used, but on OK of the operator, also utilizes this correction remembering it as a new teaching avoiding the subsequent repetition of the translation mistakes made by the computer." D'Agostini teaches that a human operator proofreads the translations and upon completion, the proofread translations are stored which would inherently be in a memory.

> - D'Agostini and Kaji are analogous art because both deal with machine translation. It would be obvious to combine D'Agostini with the Kaji device for its human interaction properties to improve translation quality because "the main purpose of the present invention is to use the automatic or interactive-semiautomatic computer translation but with strong reduction of the translation

time and with the maximum obtainable quality with the intervention of the same

skilled-operator." [D'Agostini, ¶ 0126]

- **translation outputting means (103A) for outputting the translation read out**

  from said third memory (101B) to said proofreader terminal

- [D'Agostini, ¶ 0192] discloses "in this way one has the advantage of having as

  the previous one, the immediate parallel visualization of the paragraph to

  translate and what translated for the contribution of the corrections but with the

  additional advantage to be able to also see the whole text that follows both for

  the field to translate and for the translated. _**With this solution particularly the**_

  **check and comprehension times from the operator if what has been**

  **translated and corrected are reduced, having a more wide view of the**

  **entire text, of what is in translation and of what is following during**

  **translation**." The translation is outputted to the operator terminal for

  proofreading.

- D'Agostini and Kaji are analogous art because both deal with machine

  translation. It would be obvious to combine D'Agostini with the Kaji device for its

  human interaction properties to improve translation quality because "the main

  purpose of the present invention is to use the automatic or interactive-

  semiautomatic computer translation but with strong reduction of the translation

  time and with the maximum obtainable quality with the intervention of the same

  skilled-operator." [D'Agostini, ¶ 0126]

- **proofread-translation receiving means (103D) for receiving the proofread translation proofread in accordance with an instruction from the proofreader from said proofreader terminal**

- [D'Agostini, ¶ 0179] discloses "More advantageously the method provides for each correction carried out in the translated text, besides the integrated search replace and of autolearning options, the autoactivation of the differentiation of the characters of the corrected word/fragment and corresponding portion of the text to translate putting them in distinguishable characters by the rest of the text, as for example bold, italics or other color." D'Agostini teaches that the corrections are received by the terminal and the terminal is instructed by the proofreader what changes to make to the document.

- D'Agostini and Kaji are analogous art because both deal with machine translation. It would be obvious to combine D'Agostini with the Kaji device for its human interaction properties to improve translation quality because "the main purpose of the present invention is to use the automatic or interactive-semiautomatic computer translation but with strong reduction of the translation time and with the maximum obtainable quality with the intervention of the same skilled-operator." [D'Agostini, ¶ 0126]

- **proofread-translation registering means (103E) for storing the proofread translation received by said proofread-translation receiving means in said fourth memory (101B)**

- [D'Agostini, ¶ 0154] discloses "In this way the system retrieves automatically not only the correction operated by the human operator as traditionally used, but on OK of the operator, also utilizes this correction remembering it as a new teaching avoiding the subsequent repetition of the translation mistakes made by the computer." D'Agostini teaches that a human operator proofreads the translations and upon completion, the proofread translations are stored which would inherently be in a memory. The contents of what needs to be stored would inherently be registered in a table within the memory.

- D'Agostini and Kaji are analogous art because both deal with machine translation. It would be obvious to combine D'Agostini with the Kaji device for its human interaction properties to improve translation quality because "the main purpose of the present invention is to use the automatic or interactive-semiautomatic computer translation but with strong reduction of the translation time and with the maximum obtainable quality with the intervention of the same skilled-operator." [D'Agostini, ¶ 0126]

- **completed-text outputting means (103) for reading out and outputting the proofread translation from said fourth memory**

- [D'Agostini, ¶ 0192] discloses "in this way one has the advantage of having as the previous one, the immediate parallel visualization of the paragraph to translate and what translated for the contribution of the corrections but with the additional advantage to be able to also see the whole text that follows both for the field to translate and for the translated. ***With this solution particularly the***

check and comprehension times from the operator if what has been

translated and corrected are reduced, having a more wide view of the

entire text, of what is in translation and of what is following during

translation." The completed proofread sections of the text are displayed to the

user at all times, thus the completed-text output would be displayed upon

completion of the proofreading.

- D'Agostini and Kaji are analogous art because both deal with machine

    translation. It would be obvious to combine D'Agostini with the Kaji device for its

    human interaction properties to improve translation quality because "the main

    purpose of the present invention is to use the automatic or interactive-

    semiautomatic computer translation but with strong reduction of the translation

    time and with the maximum obtainable quality with the intervention of the same

    skilled-operator." [D'Agostini, ¶ 0126]

Neither Kaji nor D'Agostini teach:

    - A distributed network environment

Brown, in analogous art, teaches the above limitation,

- [Brown, column, lines] discloses "As another example, the user 503 might

    receive a document from the external network 1010, translate it into another

    language using the translation system 1001, and then send the translation out

    on the external network 1010."

- Brown and Kaji are analogous art because both pertain to machine translation.

    It would be obvious to combine Brown with the Kaji device because Brown

target-structured language models for statistical machine translation to
overcome the inadequacies of rule-based machine translation.

As per claim 2, claim 1 is incorporated and Kaji teaches:

- **text analyzing means (103) for analyzing and dividing the original text into
  a plurality of text elements and storing them in said first memory**

- [Kaji, columns 6-7, lines 62-67, 1-5] discloses "in analyzing an English text,
  each character string including a period is collated with the words in the list, and
  the period is not judged to be a sentence delimiter if the character string
  coincides with any of the listed words. The morphological analysis method
  used in this embodiment is disclosed in Japanese patent publication JP-A-Sho-
  58-40684 (will be called "fifth prior art"), which is incorporated herein by
  reference. In regard to extraction of compound words, a sequence of an
  adjective and succeeding nouns is extracted as a compound noun, in addition
  to a sequence of nouns." Kaji teaches a text analyzing means for analyzing and
  parsing the original text for storage.

- **translation counting means (103F) for counting the number of text
  elements of the translation stored in said third memory**

- [Kaji, column 7, lines 12-15] discloses "The same process as the preceding step
  13 produces an English word table 263 (FIG. 4B) and an English co-occurrence
  frequency matrix 265 (FIG. 5B) from the analysis result 261b of English text."
  By developing a frequency matrix, the elements would inherently be counted.

- **outputting means (103G) for outputting the number of text elements**

  counted by said translation counting means to said translator terminal

- [Kaji, column 7, lines 32-42] discloses "This step produces a Japanese-English

  word correlation matrix 266 based on the Japanese word table 262, the English

  word table 263, the Japanese co-occurrence frequency matrix 264*, the English*

  co-occurrence frequency matrix 265, and the bilingual dictionary 23. The

  word correlation matrix 266 has rows and columns arranged in correspondence

  to the words in the Japanese word table 262 of FIG. 4A and the words in the

  English word table 263 of FIG. 4B, respectively. Element (i,j) represents the

  correlation between the i-th word in the Japanese word table 262 and j-th word

  in the English word table 263." Since the translator terminal determines the co-

  occurrence matrices by comparing the frequency characteristics of the words

  elements. Thus, the number of text elements counted must be output to the

  terminal for the tables to be calculated.

As per claim 3, claim 1 is incorporated and Kaji teaches:

- **text analyzing means (103) for analyzing the original text, dividing it into a**

  plurality of text elements and storing them in said first memory

- [Kaji, columns 6-7, lines 62-67, 1-5] discloses "in analyzing an English text,

  each character string including a period is collated with the words in the list, and

  the period is not judged to be a sentence delimiter if the character string

  coincides with any of the listed words. The morphological analysis method

used in this embodiment is disclosed in Japanese patent publication JP-A-Sho-58-40684 (will be called "fifth prior art"), which is incorporated herein by reference. In regard to extraction of compound words, a sequence of an adjective and succeeding nouns is extracted as a compound noun, in addition to a sequence of nouns." Kaji teaches a text analyzing means for analyzing and parsing the original text for storage.

- **draft-translation counting means (103F) for counting the number of text elements of the draft translation stored in said second memory**

- [Kaji, column 6, lines 21-26] discloses "Subsequently, this step produces a Japanese co-occurrence frequency matrix 264. The matrix 264 has rows and columns arranged in correspondence to the words in the Japanese word table 262 as shown in FIG. 5A, and element (i,J) represents the frequency of the J-th word co-occurring with the i-th word." By developing a frequency matrix, the elements would inherently be counted.

- **outputting means (103G) for outputting the number of text elements counted by said draft-translation counting means to said translator terminal**

- [Kaji, column 7, lines 32-42] discloses "This step produces a Japanese-English word correlation matrix 266 based on the Japanese word table 262, the English word table 263, ***the Japanese co-occurrence frequency matrix 264***, the English co-occurrence frequency matrix 265, and the bilingual dictionary 23. The word correlation matrix 266 has rows and columns arranged in

correspondence to the words in the Japanese word table 262 of FIG. 4A and

the words in the English word table 263 of FIG. 4B, respectively. Element (i,j)

represents the correlation between the i-th word in the Japanese word table 262

and j-th word in the English word table 263." Since the translator terminal

determines the co-occurrence matrices by comparing the frequency

characteristics of the words elements. Thus, the number of text elements

counted must be output to the terminal for the tables to be calculated.

As per claim 4, claim 1 is incorporated and Kaji teaches:

> - **text analyzing means (103) for analyzing the original text, dividing it into a**
>
>   **plurality of text elements and storing them in said first memory**
>
> - [Kaji, columns 6-7, lines 62-67, 1-5] discloses "in analyzing an English text,
>
>   each character string including a period is collated with the words in the list, and
>
>   the period is not judged to be a sentence delimiter if the character string
>
>   coincides with any of the listed words. The morphological analysis method
>
>   used in this embodiment is disclosed in Japanese patent publication JP-A-Sho-
>
>   58-40684 (will be called "fifth prior art"), which is incorporated herein by
>
>   reference. In regard to extraction of compound words, a sequence of an
>
>   adjective and succeeding nouns is extracted as a compound noun, in addition
>
>   to a sequence of nouns." Kaji teaches a text analyzing means for analyzing and
>
>   parsing the original text for storage.

Kaji fails to teach, and D'Agostini teaches in analogous art,

- **proofread-translation counting means (103F) for counting the number of text elements of the proofread translation stored in said fourth memory**

- [D'Agostini, ¶ 0131] discloses "_**A progress of translation is advantageously shown using a paragraph-counter means**_, indicating the number of checked paragraphs and the number of remaining to check and evidencing means of modified text in said couple of main translation and correction fields. In this way further reduction in the checking time is allowed because operators see immediately what remains to check."

- D'Agostini and Kaji are analogous art because both deal with machine translation. It would be obvious to combine D'Agostini with the Kaji device for its human interaction properties to improve translation quality because "the main purpose of the present invention is to use the automatic or interactive-semiautomatic computer translation but with strong reduction of the translation time and with the maximum obtainable quality with the intervention of the same skilled-operator." [D'Agostini, ¶ 0126]

- **outputting means (103G) for outputting the number of text elements counted by said proofread-translation counting means to said proofreader terminal**

- [D'Agostini, ¶ 0131] discloses "A progress of translation is advantageously shown using a paragraph-counter means, indicating the number of checked paragraphs and the number of remaining to check and evidencing means of modified text in said couple of main translation and correction fields. In this way

further reduction in the checking time is allowed because operators see

immediately what remains to check."

- D'Agostini and Kaji are analogous art because both deal with machine

translation. It would be obvious to combine D'Agostini with the Kaji device for its

human interaction properties to improve translation quality because "the main

purpose of the present invention is to use the automatic or interactive-

semiautomatic computer translation but with strong reduction of the translation

time and with the maximum obtainable quality with the intervention of the same

skilled-operator." [D'Agostini, ¶ 0126]

As per claim 5, claim 1 is incorporated and Kaji teaches:

> **- text analyzing means (103) for analyzing the original text, dividing it into a**
>
> **plurality of text elements and storing them in said first memory**

- [Kaji, columns 6-7, lines 62-67, 1-5] discloses "in analyzing an English text,

each character string including a period is collated with the words in the list, and

the period is not judged to be a sentence delimiter if the character string

coincides with any of the listed words. The morphological analysis method

used in this embodiment is disclosed in Japanese patent publication JP-A-Sho-

58-40684 (will be called "fifth prior art"), which is incorporated herein by

reference. In regard to extraction of compound words, a sequence of an

adjective and succeeding nouns is extracted as a compound noun, in addition

to a sequence of nouns." Kaji teaches a text analyzing means for analyzing and

parsing the original text for storage.

Kaji fails to teach, and D'Agostini teaches in analogous art,

- **translation counting means (103F) for counting the number of text elements of the translation stored in said third memory**

- [D'Agostini, ¶ 0247] discloses "The control bar of the main interface, also has a lot of figurative control buttons, as for example parallel field-couples scrolling controls, their alignment, the interface changing in size, the search and replace control "RS", capital to small letter change, the transfer control between fields and a Data File, the copy pastage controls, *__the word counting__*, the lock/unlocking, the spelling, the "cut-returns" for the arrangement of texts from "DOS" system having one return per line, that causes illogical analysis of the sentence, and the different controls of what to carry out the translation…" The word counting in D'Agostini associates itself with the translation prior to proofreading as can be seen in the example in Fig. 9.

- D'Agostini and Kaji are analogous art because both deal with machine translation. It would be obvious to combine D'Agostini with the Kaji device for its human interaction properties to improve translation quality because "the main purpose of the present invention is to use the automatic or interactive-semiautomatic computer translation but with strong reduction of the translation time and with the maximum obtainable quality with the intervention of the same skilled-operator." [D'Agostini, ¶ 0126]

- **outputting means (103G) for outputting the number of text elements counted by said translation counting means to said proofreader terminal**

- D'Agostini, Fig. 9 discloses the example of the outputting of the text elements

  by showing the numbered comparison of the lines in the automatic translation.

- D'Agostini and Kaji are analogous art because both deal with machine

  translation. It would be obvious to combine D'Agostini with the Kaji device for its

  human interaction properties to improve translation quality because "the main

  purpose of the present invention is to use the automatic or interactive-

  semiautomatic computer translation but with strong reduction of the translation

  time and with the maximum obtainable quality with the intervention of the same

  skilled-operator." [D'Agostini, ¶ 0126]

As per claim 6, claim 1 is incorporated and Kaji fails to teach;

  - draft-translation producing means (103H) for producing the draft

  translation of the original text read out from said first memory, and

  registering it in said second memory

Brown, in analogous art, teaches the above limitation,

  - [Brown, column 9, lines 40-42] discloses "For the training of the translation

  model, the English and French text is first aligned on a sentence by sentence

  basis." The alignment of two parallel corpora to a sentence by sentence basis is

  a draft translation. This would be placed in the second memory as taught

  above.

  - Brown and Kaji are analogous art because both pertain to machine translation.

  It would be obvious to combine Brown with the Kaji device because Brown

target-structured language models for statistical machine translation to

overcome the inadequacies of rule-based machine translation.

As per claim 7, claim 6 is incorporated and Kaji fails to teach;

　　- a fifth memory (103B) which stores a draft translation unnecessary to be

　　translated or proofread, wherein said draft-translation producing means

　　(103H) includes means for determining whether or not translation and

　　proofreading are necessary for the produced draft translation, and stores

　　the draft translation in said fifth memory when the determining means

　　determines that neither translation nor proofreading is necessary for the

　　draft translation

Brown, in analogous art, teaches the above limitation,

　　- [Brown, column 38, lines 30-48] discloses "In some embodiments, illustrated in

　　FIG. 24, a translation model 706 computes the probability of a source structure

　　given a target structure as the sum of the probabilities of all alignments between

　　these structures: ##EQU16## In other embodiments, a translation model 706

　　can compute the probability of a source structure given a target structure as the

　　maximum of the probabilities of all alignments between these structures:

　　##EQU17## As depicted in FIG. 25, the probability $P.sub..theta.$ (f.vertline.e) of

　　a single alignment is computed by a detailed translation model 2101. The

　　detailed translation model 2101 employs a table 2501 of values for the

　　parameters .theta.." Since the alignment is a draft translation, Brown teaches in

figure 24 that there is a score associated with each alignment and an overall

score for all alignments that represents the source structure given the target

structure. This is analogous to the appropriation score in the instant application

and is a means for determining whether a translation or proofreading is

necessary. Furthermore, [Brown, column 12, lines 49-57] discloses that

"translated target text produced by the translation application running on the

computer system ... may be displayed on the terminal 1012, ***stored in RAM***

1005, stored data storage 1002, printed on the printer 1011, or perhaps

transmitted out over the external network 1010." All translations would have to

be stored in RAM, so whether the translation or proofreading determination

means is triggered, the draft translation would be stored in memory.

- Brown and Kaji are analogous art because both pertain to machine translation.
  It would be obvious to combine Brown with the Kaji device because Brown
  target-structured language models for statistical machine translation to
  overcome the inadequacies of rule-based machine translation.

As per claim 8, claim 1 is incorporated and Kaji fails to teach:

- **translation outputting means (103A) is means for further reading out the**
  translation together with the original text associated therewith from said
  first memory, and outputting them to said proofreader terminal

D'Agostini, in analogous art, teaches the above limitations,

- [D'Agostini, ¶ 0167] discloses "The method includes the visualization on the

screen of a first scrolling field to receive the text to translate and a second

scrolling field to show the translation, one adjacent and parallel to the other,

which proportion automatically in the respective width in a manner inversely

proportional to the length of the two texts."

- D'Agostini and Kaji are analogous art because both deal with machine

translation. It would be obvious to combine D'Agostini with the Kaji device for its

human interaction properties to improve translation quality because "the main

purpose of the present invention is to use the automatic or interactive-

semiautomatic computer translation but with strong reduction of the translation

time and with the maximum obtainable quality with the intervention of the same

skilled-operator." [D'Agostini, ¶ 0126]

As per claim 9, claim 1 is incorporated and Kaji teaches:

- **text analyzing means (103) for analyzing and dividing the original text into**

a plurality of text elements and storing them in said first memory

- [Kaji, columns 6-7, lines 62-67, 1-5] discloses "in analyzing an English text,

each character string including a period is collated with the words in the list, and

the period is not judged to be a sentence delimiter if the character string

coincides with any of the listed words. The morphological analysis method

used in this embodiment is disclosed in Japanese patent publication JP-A-Sho-

58-40684 (will be called "fifth prior art"), which is incorporated herein by

reference. In regard to extraction of compound words, a sequence of an

adjective and succeeding nouns is extracted as a compound noun, in addition

to a sequence of nouns." Kaji teaches a text analyzing means for analyzing and

parsing the original text for storage.

- said translation outputting means (103A) is means for reading out and outputting a proofread translation preceding and/or succeeding a translation and having a predetermined number of text elements stored in said fourth memory, together with the translation, to said proofreader terminal

- [D'Agostini, Fig. 8] shows that there is a GUI visualized on a display, which is the translation outputting means. Fig. 8 teaches a proofreading action on the documents and would subsequently be changed upon confirmation, thus the proofread translation and translation are displayed. Fig. 9 shows the counting of the predetermined number of text elements established upon alignment. All of this information is output to the proofreader terminal.

- D'Agostini and Kaji are analogous art because both deal with machine translation. It would be obvious to combine D'Agostini with the Kaji device for its human interaction properties to improve translation quality because "the main purpose of the present invention is to use the automatic or interactive-semiautomatic computer translation but with strong reduction of the translation time and with the maximum obtainable quality with the intervention of the same skilled-operator." [D'Agostini, ¶ 0126]

As per claim 10, claim 1 is incorporated and Kaji fails to teach:

- **color information storing means (103) for storing color-designating information designating display colors of an original text, a provisional translation, a translation and a proofread translation, respectively**

- [D'Agostini, ¶ 0169] discloses "In order to further speed-up and individuate the missing words not translated the system provides automatically the conversion of _**their writing in bold or italic or different color**_, facilitating and speeding up furthermore the system for the search and the individualization of the parallel correspondence between the two words/expressions in the parallel fields." Furhtermore, [D'Agostini, ¶ 0179] discloses "More advantageously the method provides for each correction carried out in the translated text, besides the integrated search replace and of autolearning options_**, the autoactivation of the differentiation of the characters of the corrected word/fragment and corresponding portion of the text to translate putting them in distinguishable characters by the rest of the text, as for example bold, italics or other color**_" D'Agostini teaches the use of different colors for the applicable translations, this color information would inherently have to be stored in memory.

- D'Agostini and Kaji are analogous art because both deal with machine translation. It would be obvious to combine D'Agostini with the Kaji device for its human interaction properties to improve translation quality because "the main purpose of the present invention is to use the automatic or interactive-semiautomatic computer translation but with strong reduction of the translation

time and with the maximum obtainable quality with the intervention of the same

skilled-operator." [D'Agostini, ¶ 0126]

- **said translation outputting means (103A) is one for instructing said**

   translator terminal and/or said proofreader terminal to output the original

   text, the provisional translation, the translation and the proofread

   translation, in accordance with the color-designating information stored in

   said color information storing means

- [D'Agostini, ¶ 0169] discloses "In order to further speed-up and individuate the

   missing words not translated the system provides automatically the conversion

   of _**their writing in bold or italic or different color**_, facilitating and speeding up

   furthermore the system for the search and the individualization of the parallel

   correspondence between the two words/expressions in the parallel fields."

   Furhtermore, [D'Agostini, ¶ 0179] discloses "More advantageously the method

   provides for each correction carried out in the translated text, besides the

   integrated search replace and of autolearning options_**, the autoactivation of**_

   **the differentiation of the characters of the corrected word/fragment and**

   **corresponding portion of the text to translate putting them in**

   **distinguishable characters by the rest of the text, as for example bold,**

   **italics or other color**"

- D'Agostini and Kaji are analogous art because both deal with machine

   translation. It would be obvious to combine D'Agostini with the Kaji device for its

   human interaction properties to improve translation quality because "the main

purpose of the present invention is to use the automatic or interactive-semiautomatic computer translation but with strong reduction of the translation time and with the maximum obtainable quality with the intervention of the same skilled-operator." [D'Agostini, ¶ 0126]

Claim 11 is rejected under the same rejections as claim 1 for having parallel limitations other than allowing a computer to operate in such a manner which is disclosed in [Kaji, column 2, lines 36-40] " In order to attain the above-mentioned objects, the present invention executes the following steps by a computer for automatic extraction of a translation pair of words which comprises a word of the first language and a word of the second language corresponding thereto."

Conclusion

8.   Refer to PTO-892, Notice of References Cited for a listing of analogous art.

9.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to GREG A. BORSETTI whose telephone number is (571)270-3885. The examiner can normally be reached on Monday - Thursday (8am - 5pm Eastern Time).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chameli Das can be reached on 571-272-3696. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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